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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,420	02/21/2001	Oh Nam Kwon	8733.388.00	5851
30827	7590	06/16/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			WANG, GEORGE Y	
			ART UNIT	PAPER NUMBER
			2871	
DATE MAILED: 06/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Wm

<b>Office Action Summary</b>	<b>Application N .</b> 09/788,420	<b>Applicant(s)</b> KWON ET AL.	
	<b>Examin r</b> George Y. Wang	<b>Art Unit</b> 2871	

**-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 11-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 29, 2004 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wakai et al. (U.S. Patent No. 5,055,899, from hereinafter "Wakai").

4. As to claim 1, Wakai discloses a liquid crystal display (LCD) device having a substrate (fig. 8, ref. 101), a first conductive layer (fig. 8, ref. 102) on the substrate, a first insulating layer (fig. 8, ref. 103) on the first conductive layer, a second conductive

layer (fig. 8, ref. 104) on the first insulating layer, a third conductive layer (fig. 8, ref. 106a, 107a) on the second conductive layer, a second insulating layer (fig. 8, ref. 118) on the third conductive layer, the second insulating layer having a hole (fig. 8, ref. 105) exposing a portion of the third conductive layer, a fourth conductive layer (fig. 8, ref. 110) on the second insulating layer and electrically contacting the third conductive layer, and a fifth conductive layer (fig. 8, ref. 106b, 107b) between the third and fourth conductive layers.

5. Regarding claims 2-3, Wakai discloses an LCD device as recited above where the first conductive layer includes aluminum metal (col. 14, line 47-50).

6. As per claim 4, Wakai discloses an LCD device as recited above where the second conductive layer includes a semiconductor (abstract).

7. As to claims 5-6, Wakai discloses an LCD device as recited above where the third conductive layer has a first and second parts that include metal (col. 5, lines 49-57) and in between the first and second parts is where the semiconductor is etched (fig. 8, ref. 104; col. 5, lines 49-52).

8. Regarding claim 7, Wakai discloses an LCD device as recited above where the fourth conductive layer includes a transparent electrode (col. 4, lines 56-59).

9. As to claims 8-9, Wakai discloses an LCD device as recited above where the fifth conductive layer includes conductive metal such as Cr (col. 4, lines 40-43).

10. As per claim 10, Wakai discloses an LCD device as recited above further having a second semiconductor layer (abstract) formed between the first insulating layer and the second conductive layer.

### ***Response to Arguments***

11. Applicant's arguments filed March 29, 2004 have been fully considered but they are not persuasive.

While Applicant has amended claim 1 by adding limitations that change the scope of the invention, Applicant has nevertheless failed to provide any convincing arguments.

Applicant's first argument is that the second insulating layer of the Wakai reference does not teach "a contact hole exposing a portion of the third conductive layer." However, Examiner asserts that the Wakai reference clearly teaches this in Fig.

8. See bolded area below.

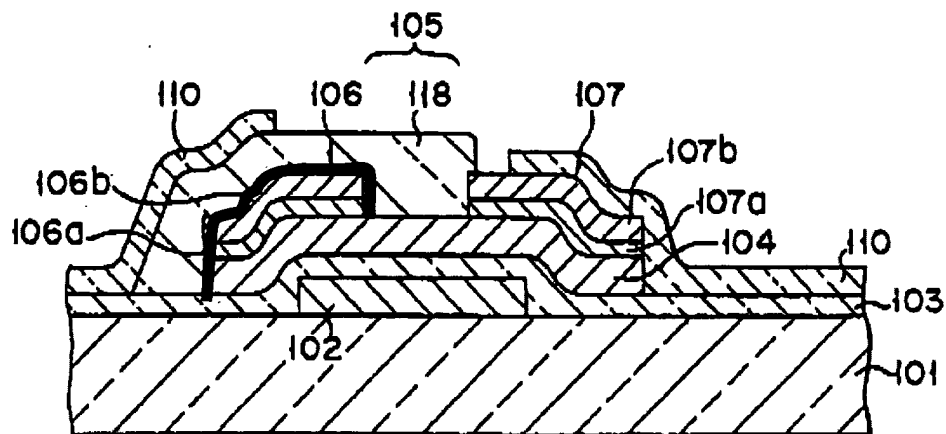


FIG. 8

Applicant's second argument is that the Wakai reference does not disclose a fourth conductive layer on the second insulating layer and electrically contacting the third conductive layer. Examiner asserts that the Wakai reference does teach this in Fig. 8. See circled area below.

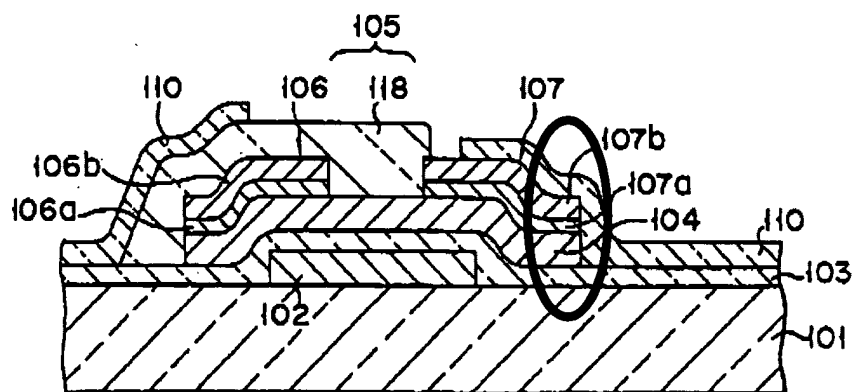


FIG. 8

Accordingly, Applicant's arguments are not persuasive. The Wakai reference clearly teaches all the claimed limitations. Therefore, Examiner, holds to the validity of the Wakai reference and maintains rejection.


***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw  
June 8, 2004



**ROBERT H. KIM**  
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